

REMARKS

Claims 1-4 and the specification have been amended to further particularly point out and distinctly claim subject matter regarded as the invention. These changes include removing the word "diagonal" from "cosine matrix". As can be seen from page 8, line 21 through page 9 line 1, the cosine matrix is not a diagonal matrix. A diagonal matrix is a square matrix which has a zero in all the entries off the main diagonal. Taking, for example, the entry at the top of the matrix but one entry over from the left, it can be seen that the value is " $C4 * C1$ ", which according to the formula provided on page 9 would result in a value of approximately 1. As this entry is off the main diagonal, this means the cosine matrix is not diagonal. As will be discussed below, it is believed that this may have caused confusion with regards to the claims and the prior art.

Claims 5-23 are hereby cancelled without prejudice in response to the final restriction requirement.

The 35 U.S.C. § 102 Rejection

Claims 1-4 stand rejected under 35 U.S.C. § 102(b) as being allegedly anticipated by Bhaskaran. This rejection is respectfully traversed.

Claims 1-4 as amended contain a limitation regarding "multiplying a cosine matrix and the standard quantization matrix to create a modified standard quantization matrix". This has the effect of reducing the number of multiplications in the later IDCT stage to only 5, and thus increases the speed of the IDCT calculation, which, as discussed, is the bottleneck of the MPEG decoder. Bhaskaran discloses no such limitation. The Office Action refers to a diagonal matrix D in Bhaskaran as being a cosine matrix. However, as

was discussed earlier, the cosine matrix is not a diagonal matrix. It is believed that the original claims, by containing the word "diagonal" in relation to "cosine matrix" may have caused some confusion in this regard. The claims have been amended to remove this confusion.

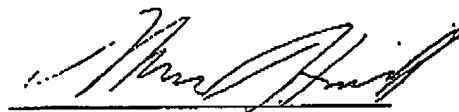
In view of the foregoing, it is respectfully asserted that the claims are now in condition for allowance.

Request for Allowance

It is believed that this Amendment places the above-identified patent application into condition for allowance. Early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Respectfully submitted,
D'ALESSANDRO & RITCHIE



Marc S. Hanish
Reg. No. 31,562

Dated: December 21, 2000

D'Alessandro & Ritchie
P.O. Box 640640
San Jose, CA 95164-0640
(408) 441-1100

(408) 292-5800